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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER TOPGYAL, GELEK W				
ART UNIT 2621		PAPER NUMBER		
NOTIFICATION DATE 02/10/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdoCKET@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/519,034

Applicant(s)

TAKASHIMA ET AL.

Examiner

GELEK TOPGYAL

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. **Claims 2 and 16** are objected to because of the following informalities: the claimed limitations of "the hand" and "the other hand" does not have antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation function." The New IEEE Standard Dictionary of Electrical and Electronic Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held statutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 23 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 23 defines a *program* embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed *program* can range from a paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggest amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. **Claims 1-2, and 4-23** are rejected under 35 U.S.C. 102(e) as being anticipated by Okada et al. (US 6,922,521).

Regarding claims 1 and 21-23, Okada et al. teaches an information processing apparatus for recording an AV stream to a recording medium, said information processing apparatus comprising: generating means for generating said AV stream constituting each of a plurality of reproduction paths (col. 8, lines 5-25 teaches of a plurality of reproduction paths); controlling means for controlling the generation of said AV stream by said generating means (col. 7, lines 25-33 teaches of AV files); and recording means for recording to said recording medium said AV stream generated by said generating means (col. 7, lines 25-33 teaches of AV files); wherein said AV stream is constituted by data blocks making up predetermined units (col. 11, lines 22-43 teaches of VOBs and VOBUs); and wherein said controlling means controls parameters for said AV stream generated by said generating means as well as a layout of said data blocks, in accordance with information indicative of reproducing characteristics in effect when said AV stream recorded on said recording medium is reproduced therefrom (Figures 11-16 shows the structure of PGCI (original and user defined) which defines a layout of the VOBs and VOBUs for reproduction).

Regarding claim 2, Okada teaches the claimed wherein said information indicative of said reproducing characteristics denotes relations between jump distances

between said data blocks recorded in separate locations on the hand, and jump times corresponding respectively to said jump distances on the other hand, for use during reproduction of said AV stream in keeping with said reproduction paths (Fig. 12, includes a plurality of Start and End times in each "Cell I" information, the End time of a first and the Start time of the following Cell I information creates a jump in the data blocks during reproduction).

Claims 4 and 7 are rejected for the same reasons as discussed in claim 1 above since the PGCI information are recorded onto the recording medium and are subsequently used for reproduction of the AV stream.

Regarding claims 5-6, Okada teaches the claimed as discussed in claim 1 and furthermore, the AV stream's data is stored in the format of MPEG using VOBs and VOBUs as a finite block of information. The original PGCI and user defined PGCI includes Cells that determines a logical ordered in which the AV stream is reproduced. Furthermore, during reproduction, the PGCI are used to determine which VOB/VOBU is to be reproduced. As to claim 6, the broadly claimed "parameter" to be given priority can range from the selection of playback (Col. 18, lines 1+) or the mere action of choosing to create a user defined PGCI, wherein only a selected area of the video is to be used for reproduction.

Regarding claim 8, Okada teaches in col. 18, lines 1+ of the ability to reproduce the video stored on the recording medium according to the PGCI (original or user defined).

Regarding claims 9 and 15, Okada teaches the claimed wherein said controlling means generates first management information which includes map information for indicating locations of starting points of said AV stream on each of said reproduction paths as well as locations of entry points of the AV streams and which is used to control AV stream status (Fig. 12, includes a plurality of Start and End times in each "Cell I" information, the End time of a first and the Start time of the following Cell I information creates a jump in the data blocks during reproduction), said controlling means further generating second management information which includes designation information for designating a starting point and an end point of each of said AV streams and for designating the AV stream for each of said reproduction paths and which is used for reproduction management (Fig. 12, includes a plurality of Start and End times in each "Cell I" information, the End time of a first and the Start time of the following Cell I information creates a jump in the data blocks during reproduction. This is applicable to a second original PGCI or a user defined PGCI); and wherein said recording means further records said first management information and said second management information to said recording medium (col. 7, lines 35-41 teaches the all the PGCI information are recorded on the recording medium).

Regarding claims 10 and 16, Okada teaches the claimed wherein said generating means encodes said AV stream in such a manner that said AV stream concludes within each of segments delimited by said change points (Fig. 12, the PGCI information is delimited by a plurality of "Cell I" sections); and wherein said controlling means creates a correspondence table describing relations of correspondence between

presentation timestamps of said entry points on the one hand and packet numbers on the other hand (col. 10, lines 51+ and col. 11, lines 11-21 teaches of T map information that is used to find the location of the data on the recording medium).

Regarding claims 11 and 17-18, Okada teaches the claimed in col. 11, lines 22-42 of VOBs/VOBUs. Essentially the VOB/VOBUs consists of at least one GOP as per the MPEG standard and is therefore inherent.

Regarding claims 12, 13 and 19, Okada teaches in col. 17, lines 14+ that an MPEG transport stream is recorded onto the recording medium and is used to generate the management information of D_VOB. Therefore, the D_VOB's ID (D_VOB_ID in col. 22-32) is in direct relation to the MPEG transport stream.

Regarding claim 14, Okada teaches that during the recording procedure, the "random access indicator" is used to determine a start and facilitates the encoding of a new VOB. Therefore, these points in the video are locations where a reproduction path is switchable.

Regarding claim 20, as discussed above Okada teaches a T map that is created.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US 6,922,521).

Regarding claim 3, Okada teaches the claimed as discussed in claim 1 above, however, does not particularly teach wherein said parameters for said AV stream includes a "rate" of said AV stream. It is well known and old in the art for video recorded on optical disks to include rate information so that reading/writing operations can be completed by calculating the location or setting a rate for playback.

Therefore, Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include rate information of an AV stream so that a AV stream recorded on an optical disk can be played successfully.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references teaches systems that allows for different playlists/PGCs that allows for different reproduction paths.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GELEK TOPGYAL whose telephone number is (571)272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gelek Topgyal/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621